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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,352	03/19/2004	Kenneth Brakeley Welles II	RD25755-10	9210

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GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER
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EDWARDS JR, TIMOTHY

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/804,352

Applicant(s)

WELLES ET AL.

Examiner

Timothy Edwards, Jr.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Election filed February 28, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 15-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-14 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1,4,7,9-12 are rejected on the ground of nonstatutory double patenting over claims 1-4 of U. S. Patent No. 6,737,984 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: claims 1,4,7,9-12 of the present application are recited in claims 1-4 of the cited patent.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 8 recites the limitation "said clear frequencies identified by said receiver" in line 2. There is insufficient antecedent basis for this limitation in the claim.

3. Claims 2-5 recites the limitation "said band pass filter" in line 2, of each respective claim. There is insufficient antecedent basis for this limitation in the claim. Examiner is unclear if this is the "narrow band pass filter" being referred to.

***Claim Objections***

4. Claim 8 is objected to because of the following informalities: depends on itself. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3,7,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Argyroudis '758, and further in view of Hunt '229 (submitted IDS).

Considering claim 1, Argyroudis discloses a telemetry system comprising, a) a plurality of utility meters adapted to measure utility usage of respective customers and provided usage data (see col 4, lines 59-62 and fig 3); b) a power line extending between customers (see fig 3); c) the utility meter comprising a transceiver connected to the power line, transceiver adapted to receive utility meter data provided by utility meters transmitted over power line (see col 4, lines 50-54 and col 16, lines 13-22); except Argyroudis does not specifically recite transceiver including a narrow band pass filter for filtering signals on the power line. Hunt teaches in col 4, lines 20-26 the use of a narrow band pass filter in a receiver for filtering signals on a power line communication system. One of ordinary skill in the art readily recognizes the interference and the low signal-to-noise ratios associated with communication on power lines. Therefore, it would have been obvious to one of ordinary skill in the art to include a narrow band pass filter in the receiver means of Argyroudis as taught by Hunt because both systems is concern with the transmitting/receiving of utility data over power lines and the use of this filter in the Argyroudis system would alleviate some of the problems associated with receiving data over power lines.

Considering claims 2 and 3, Argyroudis does not specifically recite his narrow band pass filter has a pass band of less than 10% or 1% of the center frequency of a band

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pass filter. Hunt teaches, in col 8, lines 23-38 the use of a band pass filter tuned to the middle of an output carrier frequency, the narrow band filters are tuned to the upper and lower ranges, respectively of the band pass filter's output carrier frequency. One of ordinary skill in the art would readily recognize the ability to tune a narrow band pass filters to pass any desire percentage of a center frequency of a band pass filter would allow a transceiver to operate at any desired frequency range. Obviousness rejection is as stated in claim 1.

Considering claim 7, Argyroudis does not specifically recite the transceiver is adapted to detect utility data being transmitted over the power line. Hunt teaches this limitation see col 6, lines 64-67. Obviousness rejection is as stated in claim 1.

Considering claim 9, Argyroudis does not specifically recite the transceiver is a frequency shift key (FSK) transceiver. Argyroudis discloses in col 12, lines 49-60 (see fig 2) receiving data via power line communication. Hunt teaches in col 6, lines 64-67 the use of FSK modulation to transmit utility data over a power line is well known in the art.

Claims 6,8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Argyroudis and Hunt as applied to claim 1 above, and further in view of Vander Mey et al [US 5,777,544].

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Considering claim 6, Argyroudis does not specifically recite monitoring of the power lines to detect the present of radio frequency transmissions. However, Vander Mey et al teaches (see col 3, lines 23-33) monitoring power lines to detect the present of radio frequency transmissions. Even though, Argyroudis does not specifically recite this limitation one of ordinary skill in the art would appreciate the use of a means to monitor the power lines to detect the present of radio frequency transmissions method in the Argyroudis system as taught by Vander Mey et al because both system are concern with the transmission of data on power lines and this would cut down on the collision of data on the power lines.

Considering claims 8, the limitation of these claims are interpreted and rejected as stated in claim 6.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10,12,13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunt '229 (submitted IDS).

Considering claim 10, a) a transmitter configured to transmit utility data over power lines (see col 6, lines 53-58); b) a receiver configured to receive utility meter data over power lines (see col 6, lines 65-67); c) receiver including a narrow band pass filter (see col 8, lines 30-35).

Considering claim 12, Hunt discloses the limitation of this claim in col 6, lines 53-55.

Considering claim 13, Hunt discloses the limitation of this claim in col 6, lines 64-67.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt as applied to claim 10 above, and further in view of Vander Mey et al '544 (submitted IDS).

Considering claim 11, Hunt does not specifically recite monitoring of the power lines to detect the present of radio frequency transmissions. Vander Mey et al teaches (see col 3, lines 23-33 and col 10, lines 19-30) the use of a narrow band filter monitoring power lines to detect the present of radio frequency transmissions. Even though, Hunt does not specifically recite this limitation, Hunt discloses the use of a narrow band pass filter in a receiver circuit. One of ordinary skill in the art would appreciate the use of a means to monitor the present of radio frequency transmissions on power lines in the Hunt system as taught by Vander Mey et al because both system are concern with the use of narrow band filter and the transmission of data on power lines. Also, the detection of a



signal's present would cut down on the collision of data on the power lines and allow the receiver to turn-on only when a valid signal is present.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt '229.

Considering claim 14, Hunt does not disclose the use of a remote interrogator. However, one of ordinary skill in the art would readily recognize the method of interrogating a utility meter is well known in the art. Examiner takes Official Notice this method is well known in the art.

***Allowable Subject Matter***

9. Claims 4,5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication should be directed to Examiner Timothy Edwards, Jr. at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

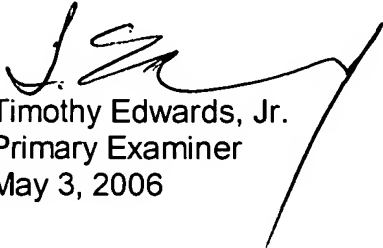
If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached at (571) 272-7308.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Timothy Edwards, Jr.  
Primary Examiner  
May 3, 2006